Claims

[c1] A laser light system comprised of more than one laser configured to provide the effect of a more powerful single laser using laser alignment so that the lasers are superimposed on each other or next to each other and comprising:
a laser light beam array formed by mounting together substantially parallel a plurality of laser light generators which project more than one laser light beam in substantially the same direction relative to a common optical axis;
an electrical power source connected to each of said laser light beam generators for powering said generators;
a laser light beam array electrical circuit connecting said power source and each of said laser generators;
an electrical on/off switch connected to said electrical circuit for turning said laser generators on and off;
a housing, said laser light beam array, electrical power source and electrical on/off switch mounted within said housing; and
a light beam optical manipulation device which allows laser light beams emitted from said laser light beam array to pass through and outside said housing so that said laser light beams form a predetermined pattern at a defined distance from said laser light generators.

[c2] The laser light of claim 1 wherein said laser light generators are off the shelf laser light sources that meet U.S. Government safety regulations of 5 milliwatts or less.

[c3] The laser light of claim 1 wherein said light beam manipulation device includes a line forming beam pattern.

[c4] The emergency light of claim 3 having a means for rotatably projecting light emitted from said laser light beam array along a 360 ° plane.

[c5] An emergency light as in claim 4 wherein said means for projecting light emitted from said laser light beam array along a 360 ° plane is an array cylinder; said base open at one end and closed at the opposite end, said base enclosing said batteries, said light circuit and a motor, said motor connected to said light

circuit so that when said switch is closed said motor is energized, said switch mounted within said base so that it is operable from outside said base;
said array cylinder extending through said light platform, said array cylinder rotatably attached to said light platform so that it rotates freely about an axis which is perpendicular to the plane created by the top of said light platform;
said base open end closed and sealed by the attachment of said light platform, said laser array disposed within said base so that light beams emitted from said laser array are directed through said array cylinder along an axis perpendicular to the plane created by the top of said light platform and reflected by said mirror;
said array cylinder adapted with cylinder gears along the end contained within said base, said motor adapted with motor gears for engaging said cylinder gears, said motor mounted within said base so that said motor gears engage said cylinder gears when said light platform is attached to said base, said motor rotates said array cylinder from within said base when energized;
a two-degree of freedom gimbal including an inner gimbal and an outer gimbal; and
said housing pivotally mounted within said inner gimbal supporting said housing and pivotal about a first axis, said inner gimbal mounted within said outer gimbal supporting said inner gimbal and pivotal about a second axis which is perpendicular to said first axis, said housing arranged within said inner and outer gimbal so that said housing is maintained in a level horizontal position due to gravity.

[c6]

The emergency signal light of claim 3 wherein said housing includes an elongated, tubular, cylindrical member and a projection head, said member open at the first end and closed at the second end, said projection head open at the first end and closed and sealed at the second end by said lens;
said member enclosing said batteries and said power control circuit, said switch mounted within said handle so that it is operable from outside said member;
the outside of said member having fastening threads at the first end, the inside surface of said first end of said projection head having receiving threads of a corresponding pitch to permit engagement with said fastening threads of said

member,

The emergency signal light of claim 6, wherein:

said projection head having a seat which accommodates an o-ring seal;

an o-ring seal connected to said projection head;

said projection head closing and sealing said member by engagement of said fastening threads and said receiving threads and compression of said o-ring seal;

said laser array disposed within said projection head so that light beams emitted from said laser array are directed along an optical axis parallel to said member through said lens and away from said second end of said member.

[c7] The emergency signal light of claim 2 wherein said laser light beams emitted by said laser light generators are altered using an optical alignment means, so that said laser light beams are aligned along a single plane parallel to one another.

[c8] The emergency signal light of claim 7 wherein said laser light pattern emitted by said laser light generators pass through an optical lens so that said aligned laser light pattern is caused to diverge so that at a distance 8 miles away said laser light pattern spreads out to a height of approximately 100 feet.

[c9] The emergency light of claim 8 having a means for projecting light emitted from said laser light beam array along a 360 ° plane.

[c10] An emergency light as in claim 9 wherein said means for projecting light emitted from said laser light beam array along a 360 ° plane is an array cylinder;

said base open at one end and closed at the opposite end, said base enclosing said batteries, said light circuit and a motor, said motor connected to said light circuit so that when said switch is closed said motor is energized, said switch mounted within said base so that it is operable from outside said base;

said array cylinder extending through said light platform, said array cylinder rotatably attached to said light platform so that it may rotate freely about an axis which is perpendicular to the plane created by the top of said light platform, said array cylinder containing and housing said lens and a mirror, said lens adapted so that light beams emitted from said laser array may pass through with or without influence;

said base open end closed and sealed by the attachment of said light platform, said laser array disposed within said base so that light beams emitted from said laser array are directed through said array cylinder along an axis perpendicular to the plane created by the top of said light platform and reflected out through said lens by said mirror;

said array cylinder adapted with cylinder gears or other suitable rotating means along the end contained within said base, said motor adapted with motor gears or other suitable rotating means for engaging said cylinder gears, said motor mounted within said base so that said motor gears engage said cylinder gears when said light platform is attached to said base, said motor rotates said array cylinder from within said base when energized;

said housing pivotally mounted within an inner gimbal supporting said housing and pivotal about a first axis, said inner gimbal mounted within an outer gimbal supporting said inner gimbal and pivotal about a second axis which is perpendicular to said first axis, said housing arranged within said inner and outer gimbal so that said housing is maintained in a level horizontal position due to the pendulum effect.

[c11]

The emergency signal light of claim 7 wherein said housing includes an elongated cylindrical handle and a projection head, said handle open at the first end and closed at the second end, said projection head open at the first end and closed and sealed at the second end by said lens;

said handle enclosing said batteries and said power control circuit, said switch mounted within said handle so that it is operable from outside said handle;

the outside of said handle having fastening threads at the first end, the inside surface of said first end of said projection head having receiving threads of a corresponding pitch to permit engagement with said fastening threads of said handle, said projection head having a seat which accommodates an o-ring seal;

said projection head closing and sealing said handle by engagement of said fastening threads and said receiving threads and compression of said o-ring seal;

said laser array disposed within said projection head so that light beams emitted from said laser array are directed along an optical axis parallel to said

handle through said lens and away from said second end of said handle.

[c12] The emergency light of claim 3 having a means for projecting light emitted from said laser light beam array along a 360 ° plane.

[c13] An emergency light as in claim 12 wherein said means for projecting light emitted from said laser light beam array along a 360 ° plane is an array cylinder; said base open at one end and closed at the opposite end, said base enclosing said batteries, said light circuit and a motor, said motor connected to said light circuit so that when said switch is closed said motor is energized, said switch mounted within said base so that it is operable from outside said base;
said array cylinder extending through said light platform, said array cylinder rotatably attached to said light platform so that it may rotate freely about an axis which is perpendicular to the plane created by the top of said light platform, said array cylinder containing and housing said lens and a mirror, said lens adapted so that light beams emitted from said laser array may pass through with or without influence;
said base open end closed and sealed by the attachment of said light platform, said laser array disposed within said base so that light beams emitted from said laser array are directed through said array cylinder along an axis perpendicular to the plane created by the top of said light platform and reflected out through said lens by said mirror;
said array cylinder adapted with cylinder gears or other suitable rotating means along the end contained within said base, said motor adapted with motor gears or other suitable rotating means for engaging said cylinder gears, said motor mounted within said base so that said motor gears engage said cylinder gears when said light platform is attached to said base, said motor rotates said array cylinder from within said base when energized;
said housing pivotally mounted within an inner gimbal supporting said housing and pivotal about a first axis, said inner gimbal mounted within an outer gimbal supporting said inner gimbal and pivotal about a second axis which is perpendicular to said first axis, said housing arranged within said inner and outer gimbal so that said housing is maintained in a level horizontal position due to the pendulum effect.

[c14] The emergency signal light of claim 3 wherein said housing includes an elongated cylindrical handle and a projection head, said handle open at the first end and closed at the second end, said projection head open at the first end and closed and sealed at the second end by said lens;
said handle enclosing said batteries and said power control circuit, said switch mounted within said handle so that it is operable from outside said handle;
the outside of said handle having fastening threads at the first end, the inside surface of said first end of said projection head having receiving threads of a corresponding pitch to permit engagement with said fastening threads of said handle, said projection head having a seat which accommodates an o-ring seal;
said projection head closing and sealing said handle by engagement of said fastening threads and said receiving threads and compression of said o-ring seal;
said laser array disposed within said projection head so that light beams emitted from said laser array are directed along an optical axis parallel to said handle through said lens and away from said second end of said handle.

[c15] The emergency signal light of claim 13 wherein said lens is adapted to cause light emitted from said laser light generators to diverge from said optical axis.

[c16] The emergency signal light of claim 15 wherein said lens is adapted to cause light emitted from said laser light generators to diverge from said optical axis.

[c17] The emergency signal light of claim 1, wherein said housing is waterproof.

[c18] The emergency signal light of claim 7, wherein said optical alignment means is a prism.

[c19] The emergency signal light of claim 7, wherein said optical alignment means is a reflector.

[c20] The emergency signal light of claim 7, wherein said optical alignment means is a lens.